Louisiana Natural Areas Registry

Quarterly Newsletter

February 2012

Volume 9 Number 2 of 4

Working with Landowners towards Conservation of Louisiana's Native Habitats

http//www.wlf.louisiana.gov/wildlife/natural-areas-registry-program/

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LNHP Welcomes Sairah Javed

The Louisiana Department of Wildlife and Fisheries Natural Heritage Program has hired a new botanist, Sairah Javed. Sairah is a native of Lake Charles and a recent graduate from Louisiana State University. She completed her Bachelor's degree in Natural Resources Ecology and Management. She will focus on projects in the state concerning rare/threatened/endangered plants as well as work on the following projects: Multi-state Sandhills/Upland Longleaf Ecological Restoration Project, the Louisiana Coastal Prairie/Grasslands Bird Habitat Project, and the Natural Areas Registry.

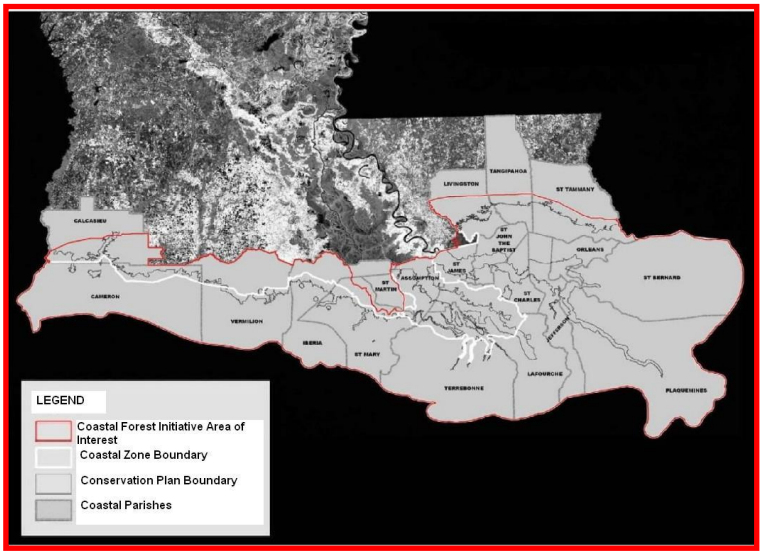
Coastal Forest Conservation Initiative (CFCI)

Coastal forests in Louisiana have long been recognized as valuable for the goods and services that they provide. More recently, their importance as buffers to hurricane storm surge and winds has been increasingly appreciated. However, since coastal forests have become increasingly vulnerable to pressures from natural forces and human impacts on the environment, these critical habitats are in danger of being lost.

The Coastal Impact Assistance Program (CIAP) was established by Section 384 of the Energy Policy Act of 2005 (Public Law 109-58--August 8, 2005) to assist oil and gas producing states and their coastal political subdivisions in mitigating the impacts from Outer Continental Shelf (OCS) oil and gas production. This funding facilitated the development of a **Coastal Forest Conservation Initiative (CFCI)** which will address the need to conserve critical coastal forest habitat for benefits that will accumulate to the State and its citizens; including the protection of homes, businesses, and critical energy infrastructure from wind, wave, flooding, and storm surge damage associated with coastal storm events, and the protection and restoration of rare or declining habitats. The ***Louisiana Coastal Protection and Restoration Authority (CPRA)*** is responsible for coordinating the CFCI and more information can be found at their web site http://www.lacpra.org/cfci

The CFCI is a ***voluntary program*** intended to provide for the conservation of forested tracts with demonstrated threats of conversion and/or opportunities for restoration, conservation, or enhanced sustainability of coastal forest tracts that provide significant ecological value and/or provide storm damage reduction functions. CFCI may also include implementation of small-scale projects to restore and enhance forest sustainability, such as those that reduce excessive ponding or impoundment, help offset subsidence, and reforest disturbed sites. The CFCI's ***primary objective*** is to work with willing landowners to protect and preserve strategic and valuable coastal forest areas. Two strategies include purchase of conservation servitudes or acquisition of property by fee title purchase.

Conservation servitudes are legally binding agreements in which a negotiated set of property rights such as timber or development rights are transferred from the landowner to a conservation agency, without removing the property from private ownership for the purpose of




Coastal Live Oak Hackberry Forest

protecting sensitive resources present on the constituent property. This allows important environmental resources to be protected without compelling landowners to sell their property. The servitude terms and conditions become permanently bound to the property upon which they have been place and persist, in perpetuity (forever), even as ownership changes. ***Benefits of a conservation servitude*** include: 1) voluntary; 2) protects private property rights; 3) could provide tax incentives; 4) does not necessarily result in the removal of property from tax rolls and; 5) landowners could retain management responsibility and some land-use options/activities.

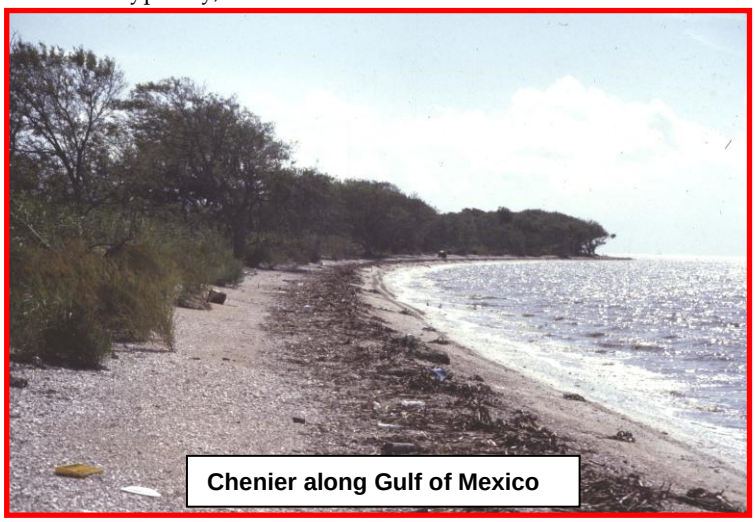
Fee title acquisition allows a government body, land trust, or other entity to purchase a property outright. This typically occurs when a landowner sells or donates property to an agency or group that manages a conservation program. **Benefits of a fee title** include: 1) confers more property rights to the purchasing conservation entity, resulting in greater opportunities for the protection of fee title lands from conversion; 2) may eliminate the need for developing servitudes that have to account for unforeseeable future change in land use and; 3) provides for great potential of public access.

All native coastal forest types are considered for CFCI. These includes baldcypress-tupelo and other swamps, live oak natural levee forests, coastal live oak-hackberry forests (cheniers), bottomland hardwood forests, barrier island live oak forests (maritime forests), mixed pine hardwood forests, longleaf pine savannahs, salt dome hardwood forests, or other native forest communities that also rank highly within the prioritization process.

The CFCI is part of an overall strategy for restoring, protecting, and conserving Louisiana's coastal forest system. It will be consistent with, and support: recommendations by participants in the Governor's Coastal Wetland Forest Conservation and Use (CWFCU) Science Working Group and Advisory Panel; *Louisiana's Comprehensive Master Plan for a Sustainable Coast*; and Louisiana Recovery Authority's *Louisiana Speaks Regional Plan*. CFCI is currently in the process of acquiring properties that ranked highly in the evaluation process. Some of these will be fee title acquisitions and some will be servitude acquisitions, but all will be for the conservation of forested properties in perpetuity.

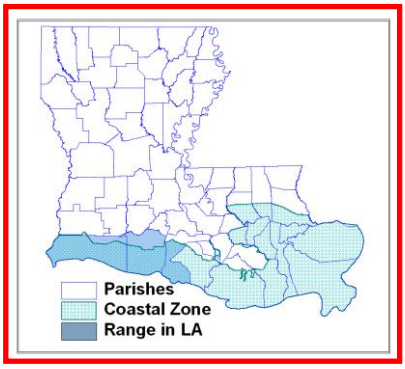
Coastal Live Oak Hackberry Forest

Rarity Rank: State and Globally Imperiled S2/G2
Synonyms: Chenier, Maritime Forest, Chenier Maritime Forest
Ecological Systems: CES203.466 West Gulf Coastal Plain Chenier and Upper Texas Coastal Fringe Forest and Woodland
General Description: Coastal Live Oak-Hackberry Forest or ***CHENIER*** (French for "place of oaks") is the natural community which formed on abandoned beach ridges primarily in southwest Louisiana. These ancient beaches were stranded via deltaic sedimentation by the constantly shifting Mississippi River. Cheniers are composed primarily of fine sandy loams with sand and shell layers or deposits. These ridges are mostly four to five feet above sea level. *Quercus virginiana* (live oak) and *Celtis laevigata* (hackberry) are the dominant canopy species. Other characteristic species are *Gleditsia triacanthos* (honeylocust), *Acer rubrum* var. *drummondii* (swamp red maple), *Zanthoxylum clava-herculis* (toothache tree), *Quercus nigra* (water oak), *Fraxinus pennsylvanica* (green ash), and *Ulmus americana* (American elm). Subcanopy species include *Crataegus viridis* (green hawthorn), *Dispyros virginiana* (persimmon), and *Ilex decidua* (deciduous holly). *Sabal minor* (palmetto) and *Opuntia* spp. (prickly pear cactus) are also common in the understory (LNHP 1986-2004, NatureServe 2005, Neyland and Meyer 1997). *Triadica sebifera* (=*Sapium sebiferum*; Chinese tallowtree) has become a serious invader of chenier forests, and can have major impacts on community structure and composition (Neyland and Meyer 1997). The cheniers are important storm barriers limiting saltwater intrusion into marshes. Typically, marshes north of cheniers are fresher than those


Chenier along Gulf of Mexico

gulfward. This community also functions as important wildlife habitat and serves as vital resting habitat for trans-gulf-migrating birds (Mueller 1990).

Current Extent and Status: Louisiana's coastal chenier forests occur in the Chenier Plain from Iberia Parish westward across Vermilion and Cameron parishes. Since this forest type is found only on **remnant beach ridges** which are higher and drier than the surrounding marshes, they were the first areas to be cleared and developed. Of the original 100,000 to 500,000 acres in Louisiana, only 2,000 to 10,000 acres remain, 2-10 % of presettlement extent. The majority of these remnant forests are altered and fragmented, and threats continue from residential development, roads and utility construction, and overgrazing. Currently there are few cheniers



supporting high-quality examples of this natural community, and very few are afforded any degree of protection. The Audubon Society maintains the 40 acre **Peveto Woods Bird and Butterfly Sanctuary** in Cameron Parish and one 146 acre tract owned by the Vermilion Parish School Board is registered with the Louisiana Natural Areas Registry Program.


Magnolia Warbler
by Michael Seymour

Importance to Neotropical Migrant Songbirds: It must be noted that coastal live oak-hackberry forests are extremely important as stopover sites for Neotropical song birds during spring and fall migration. The majority of migrants fly nonstop for more than 1,000 kilometers to cross the Gulf of Mexico each spring. At least 82 species of migratory birds regularly use these wooded habitats to replenish energy reserves necessary to complete their migration immediately after crossing the Gulf of Mexico. During fall migration these chenier habitats provide important habitat corridors and staging areas as birds move along the coast through Texas and around the Gulf of Mexico on their journey to Central and South America. The Magnolia Warbler (*Dendroica magnolia*) is one of the migratory bird species that utilize coastal live oak hackberry forests.

Species of Conservation Concern include:

Birds
American Woodcock
Yellow-billed Cuckoo
Northern Parula
Prothonotary Warbler
Painted Bunting
Field Sparrow
Orchard Oriole

Mammals
Southern Myotis

Reptiles
Ornate Box Turtle
Western Slender Glass Lizard
Timber Rattlesnake

Butterflies
Celia's Roadside Skipper
Falcate Orangetip

Beneficial Management Practices includes the prevention of conversion of existing natural forests to other land uses, prohibit livestock grazing or conduct frequent rotation of livestock for better plant regeneration, and remove any invasive exotic plant species with use of spot herbicides or mechanical means.

Private Landowner's Network

http://www.privatelandownernetwork.org/

Private Landowner Network (PLN) is a simple and effective means for landowners to connect with qualified, often local, professionals to navigate the complex ins and outs of real estate transactions, tax and estate planning, and regional land conservation activities. The PLN resource database contains local land trusts, nonprofit conservation organizations, and other folks out there who are in the business to help you fulfill your conservation objectives. PLN has the resources to help you learn about conservation opportunities that can assist you with land management, capital preservation, and tax and estate planning strategies designed to stimulate land conservation and preservation. From the basic concepts to in-depth articles or finding appropriate qualified professional assistance for your needs/circumstances, PLN has the resources you need. Learn about, connect with, and navigate your conservation related opportunities. Sign up to receive PLN quarterly newsletter.

Chinese Tallow

Upcoming Meeting on Control of Chinese Tallow
Date: March 14, 2012 **Time:** 9:00 AM to 3:30 PM
Location: Louisiana Department of Wildlife & Fisheries
2000 Quail Drive, Baton Rouge, LA
Contact: Eric Baka, RCW Safe Harbor Coordinator
Office: 318-487-5885, Email: ebaka@wlf.la.gov
This meeting includes an update on the control methods of Chinese tallow (*Triadica sebifera*) and presentations on current tallow research.

Chinese tallow trees are known by several common names including popcorn tree, chicken tree, and cancer tree. "**Popcorn tree**" refers to its numerous seeds coated in white wax and resembling popcorn that hangs on the tree into winter. "**Tallow tree**" refers to the wax produced by the tree. For over 1,500 years the Chinese cultivated tallow trees and harvested oil and wax, a fact that moved Benjamin Franklin to import the tree for soap and candle making in 1776.

These are small deciduous trees, rarely reaching 60 feet. The distinctive leaves are alternately arranged, and have smooth margins with long, pointed tips. Flowers have yellow-green sepals and no petals that mature as greenish fruits. They are well known for their fast growth and fall color. Young trees have smooth bark that becomes thicker and more furrowed as tree diameter increases. Trees can flower and produce fruit by age 3.


John R. Gwaltney


John R. Gwaltney
www.southeasternflora.com

Chinese tallow trees can invade a variety of habitats ranging from swampy to saline waters, and from full sun to shade situations. It is often found growing along roadsides, coastal areas, and streams. Larger specimens can produce up to 100,000 seeds which may be eaten and dispersed by birds, facilitating the spread of tallow. Regrowth often occurs from cut stumps or roots. Leaves, fruit, and sap are toxic to humans and may irritate the skin. Horses and cattle do not eat tallow, so it grows readily in pastures.

Some states have banned sales of tallow tree but it is still sold and is popular as a fast growing shade tree and ornamental with fall color. Tallow trees are difficult to remove once rooted and they can regrow from root fragments. Methods used to remove Chinese Tallow include mechanical, herbicides, and prescribed burning. However, herbicides are the most effective means of controlling tallow trees. Small trees can be killed using a foliar or basal spray treatment while larger trees are killed using a basal spray or injection. Foliar treatments may be made with a small garden sprayer, a backpack sprayer, or an ATV or tractor mounted tank sprayer. Aerial applications with aircraft may be required to control excessively large

acreages. Basal treatments are usually done manually, normally requiring the use of a backpack sprayer. Injection may be done with a machete and a squirt bottle, a very labor-intensive method. A specialized forestry tree injector may be necessary to treat large to treat large acreages or high numbers of stems. The herbicides used to kill tallow trees are usually non-selective and will readily kill non-target vegetation so caution must be used to protect non-target species. A common selective broadleaf herbicide used as a foliar application or by injection 2,4-D.

References:

Ernst, Jimmy. Invasive Plants. Louisiana Department of Wildlife & Fisheries Wildlife Division – Private Lands Program.

Kaufman, Sylvan Ramsey and Wallace Kaufman. 2007. Invasive Plants: A Guide to Identification and the Impacts and Control of Common North American Species. STACKPOLE BOOKS. Mechanicsburg, PA.

Mystery Plant

The showy yellow flower with a red star-shape eye in the center is our mystery plant, the **Devil's Tongue (*Opuntia humifusa*)**. Notice the short spines on the petal tips. There are also spines in the center of the flower. *Opuntia* is a native American pricklypear cactus with 51 recognized species by the USDA Plants Database at web site http://plants.usda.gov/java/profile?symbol=OPUNT. Devil's Tongue is a succulent plant with segmented spiny stems (slabs) that form carpets of up to three feet across from branching fibrous roots. They do have leaves but are inconspicuous with a scale-like base that soon fall off. Fruit are large, flattened, and reddish-brown with spotty tufts of hair-like spines that contain many seeds, shown at top right. Prickly-pear fruit are edible and somewhat sweet when ripe. Devil's Tongue occurs as scattered plants or colonies on dry rocky or sandy sites in open to slight shade. They recover rapidly after burning and are spread by animals. Pricklypear are important wildlife food plants. The fruits, seeds, and stems are eaten by many species of animals, including birds and mammals. The threatened Gopher Tortoise in the Florida Parishes of southeast Louisiana is known to eat the pads. Unfortunately, a cactus moth from Argentina, *Cactoblastis cactorum*, is spreading westward from Florida and killing our native pricklypear population. *Cactoblastis cactorum* almost totally eliminated the prickly pear in Australia after its introduction. The cactus moth was transported to the Caribbean in the 1950's to control pricklypear population but spread to North America in 1989. It has now moved as far west as Jefferson Parish in Louisiana.

Cactoblastis cactorum could eradicate pricklypear in the southwest and Mexico where it is an important economic plant.

Miller, James H. and Karl V. Miller. 2005. Revised Ed. Forest Plants of the Southeast and Their Wildlife Uses. University of Georgia Press. Athens, GA. Pages 404-405.

Martin, Alexander C., Herbert S. Zim, and Arnold L Nelson. 1961. American Wildlife & Plants: A Guide to Wildlife Food Habits. Dover Publications. New York, NY. Page 346-348.

Optunia humifusa Discover Life at http://www.discoverlife.org/mp/20q?search=Opuntia+humifusa

Whooping Crane License Plate

LDWF has developed a special license plate for Whooping Cranes for a special fee of $50.00 that will be added to the regular license fee. LDWF is working cooperatively with the US Fish and Wildlife Service, the US Geological Survey, the International Crane Foundation and the LA Cooperative Fish and Wildlife Research Unit to restore the endangered whooping crane in Louisiana. A portion of the funds from the purchase of this license plate will go towards threatened and endangered species conservation for Louisiana. Please contact Connie Dunn at (225) 765-2811, cdunn@wlf.la.gov if you are interested. We need public support for this special license plate before we can send out for production.

PREVIOUS NEWSLETTER, OCTOBER 2011, VOL. 9, NO. 1 OF 4. Registered Tunica Hills State Preservation Area, recognized David Daigle as 2011 Regional Environmental Stewardship Award Program winner, article on wetland mitigation banking and its importance for habitat conservation, license still needed to hunt feral hogs, feral hog damage on Cooter's Bog, USDA field office technical guides, and American chaffseed.

LOUISIANA NATURAL HERITAGE PROGRAM (LNHP)

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